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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,498	10/30/2003	Renzo Colle	34874-374/2002P10209US02	5722
64280 7590 09/12/2008 MINTZ, LEVIN, COHN, FERRIS, GLOVSKY & POPEO, P.C. ATTN: PATENT INTAKE CUSTOMER NO. 64280 ONE FINANCIAL CENTER BOSTON, MA 02111				
EXAMINER KARDOS, NEIL R				
ART UNIT 3623		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/696,498

Applicant(s)

COLLE ET AL.

Examiner

Neil R. Kardos

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4-17, 29 and 30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4-17, 29 and 30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/5508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This is a **NON-FINAL** Office action on the merits in response to communications filed on July 31, 2008. Currently, claims 1, 4-17, and 29-30 are pending.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 31, 2008 has been entered.

Response to Arguments

3. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. **Claims 29-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

Claim 29: Claim 29 is directed toward the statutory category of a process. In order for a claimed process to be patentable subject matter under 35 U.S.C. § 101, it must either: (1) be tied

to another statutory class (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. *See Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972). If neither of these requirements is met by the claim, the method/process is not patentable subject matter under § 101. Thus, to qualify as a statutory process under § 101, the claim should positively recite the other statutory class to which it is tied (e.g. by identifying the apparatus that accomplishes the method steps), or positively recite the subject matter that is being transformed (e.g. by identifying the material that is being changed to a different state).

Here, the claimed invention does not transform underlying subject matter to a different state or thing because it merely schedules a service order based on constraint information. Furthermore, the claimed process is not tied to another statutory category, such as a particular apparatus. The nominal recitation of a "computer-implemented" method is not sufficient to tie the claimed invention to another statutory category. Also, the recited polling of repositories and scheduling are not necessarily tied to a computer system, as they are in claim 1 (see language of claim 1, "polling a first repository of a first computer system"). Thus, the claimed invention is not patentable under § 101.

Claim 30: Dependent claim 30 is rejected for failing to remedy the deficiencies of the claim from which it depends.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 1 and 4-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Srimuang (US 2003/0061087) in view of Kalmes (US 6,934,715).**

Claim 1: Srimuang discloses a computer-implemented method comprising:

- associating, based on user input, resource information with task items that need to be completed as part of performing a service action by an engine (see paragraphs 10, 13, and 110, disclosing scheduling an appointment based on availability of required personnel, consumable resources, and non-consumable resources; paragraph 98-99, disclosing allowing users to schedule appointments based on available resources; figure 1, depicting schedule databases and availability checking; paragraphs 72, 79-81); and
- first polling a first repository of a first computer system to obtain resource information associable with the task items, the repository including human resource information, reusable resource information, and non-reusable resource information (see id.), wherein:
 - the human resource information includes availability information for human resources (see id.),

- the reusable resource information includes availability information for reusable resources (see id.),
- the non-reusable resource information includes availability information for non-reusable resources (see id.);
- scheduling resources needed to perform the service action based on results obtained from the repository of resource information (see id.).

Srimuang does not explicitly disclose:

- second polling a remote repository of a remote computer system different than the first computer system to obtain non-resource constraint information for the service action, the second polling occurring after the first polling; and
- scheduling resources needed to perform the service action based on non-resource constraint information obtained from the remote computer system, wherein the second polling automatically checks whether a proposed schedule determined by the first polling complies with the non-resource constraint information in the remote repository.

However, Srimuang does disclose retrieving information from a remote computer (see figure 1 and paragraphs 68-70).

Kalmes discloses polling a repository to obtain non-resource constraint information for the service action (see figure 1: item 104, depicting a database with contractual information; column 2: lines 16-33; column 3: line 60 through column 4: line 25, disclosing searchable databases; column 7: lines 3-38). Kalmes also discloses scheduling resources needed to perform the service action based on non-resource constraint information obtained from the remote

computer system (see column 7: lines 3-38; specifically, column 7: lines 25-30, disclosing the efficient scheduling of personnel and processes based on critical terms and conditions of contracts in a database).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the non-resource repository of Kalmes with the resource repository of Srimuang when scheduling resources. One of ordinary skill in the art would have been motivated to do so for the benefit of more efficiently satisfying demand for products that have been ordered by contract (see Kalmes: column 7: lines 3-38).

The cited references do not explicitly disclose that the non-resource polling occurs after the resource polling, or that the non-resource polling automatically checks whether a proposed schedule complies with non-resource constraint information.

Examiner takes Official Notice that it was well-known in the scheduling arts at the time the invention was made to ensure that non-resource constraints are met (e.g. ensuring that contractual deadlines are met). Furthermore, it is well-known to automate processes. See in re Venner, 262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to automatically check to ensure that non-resource constraints (such as deadlines) are met by a proposed schedule. One of ordinary skill in the art would have been motivated to do so for the benefit of efficiencies and profits associated with customer satisfaction and meeting contractual requirements.

Claim 4: Srimuang does not explicitly disclose, but Kalmes teaches: wherein the non-resource constraint information comprises information about contractual requirements (see figure 1: item 104).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the contractual requirements of Kalmes with the resource repository of Srimuang when scheduling resources. One of ordinary skill in the art would have been motivated to do so for the benefit of more efficiently satisfying demand for products that have been ordered by contract (see Kalmes: column 7: lines 3-38).

Claims 5-6: Srimuang discloses wherein the availability information for human resources comprises availability information for individuals and for groups of individuals (see paragraph 56).

Claim 7: Srimuang discloses wherein the availability information for reusable resources comprises availability information for tools (see paragraph 56, disclosing wherein the reusable resource is an object, such as a dentist's chair; paragraph 92, disclosing wherein the reusable resource is a card deck, which is a tool for playing a card game).

Claim 8: Srimuang discloses wherein the availability information for reusable resources comprises availability information for work areas (see paragraph 56, disclosing wherein the reusable resource is a location, such as a conference room; paragraph 110, disclosing wherein the reusable resource is an examination room).

Claim 9: Srimuang discloses wherein the availability information for non-reusable resources comprises availability information for spare parts (see paragraph 10, disclosing wherein the non-reusable resource is shampoo, motor oil, or tongue depressors; paragraph 56).

Claim 10: Srimuang discloses wherein:

- the task items include a human resource skill requirement (see paragraph 13, disclosing scheduling nurses and doctors),
- the human resource information includes a indication of a skill possessed by particular human resources that are represented in the human resource information (see id.), and
- the engine associates a particular human resource with a particular task item only when the indication of the skill possessed by the particular human resource matches the human resource skill requirement of the task item (see id.; paragraphs 10 and 110, disclosing scheduling an appointment based on availability of different personnel, consumable resources, and non-consumable resources).

Claim 11: Srimuang discloses wherein:

- the task items include a tool characteristic (see paragraph 13, disclosing scheduling examination rooms and x-ray rooms),

- the reusable resource information includes an indication of a tool characteristic for particular tools that are represented in the reusable resource information (see id.), and
- the engine associates a particular tool with a particular task item only when the indication of the tool characteristic for a particular tool matches the tool characteristic of the task item (see id.; paragraphs 10 and 110, disclosing scheduling an appointment based on availability of different personnel, consumable resources, and non-consumable resources).

Claims 12-14: Srimuang discloses wherein the availability information for human resources, reusable resources, and non-reusable resources is provided to the repository of resource information from a computer system other than the computer system for scheduling resources (see figure 1, depicting vendors and customers that provide availability information over a network to scheduling server 104; paragraphs 68-69, disclosing scheduling software divided among a plurality of servers; paragraphs 81-83).

Claim 15: Srimuang discloses wherein the engine and the repository of resource information are capable of communicating using a network with mobile clients (see figure 1, depicting engine and repository in scheduling server 104 communicating via the internet 102 with mobile clients 106-114).

Claim 16: Srimuang discloses wherein the engine is configured to send, to each mobile client, resource information associated with task items that need to be completed as part of performing a particular service action (see paragraph 95, disclosing wherein a customer can view an employee's availability).

Claim 17: Srimuang discloses wherein the engine is configured to receive, from each mobile client, user input for the purpose of associating resource information with a particular task item (see paragraphs 98, 104-106, and 110, disclosing wherein a customer can make an appointment that affects the availability of a resource).

8. **Claims 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glazer (US 7,174,303) in view of Kalmes, and further in view of Miller (US 2003/0036925).**

Claim 29: Glazer discloses a computer-implemented method comprising:

- receiving a request to schedule a service request (see column 2: lines 51-58; column 3: lines 59-66);
- polling a first repository to associate each task with at least one of a person, a non-reusable resource, and a reusable resource (see column 3: line 66 through column 4: line 9);
- first determining a time slot within a time range in which the associated persons, non-reusable resources, and reusable resources are available (see column 3: line 66 through column 4: line 9; figure 2); and

- second determining whether the non-resource constraints permit the service order to be scheduled during the time slot (see column 3: lines 53-55);
- scheduling the service order during the time slot (see column 4: lines 31-33).

Glazer does not explicitly disclose:

- polling a second repository remote from the first repository to automatically check for limiting non-resource constraints, the non-resource constraints identifying contractual obligations;
- scheduling the service order if contractual obligations permit such scheduling.

Kalmes discloses polling a repository to obtain contractual obligations for the service action (see figure 1: item 104, depicting a database with contractual information; column 2: lines 16-33; column 3: line 60 through column 4: line 25, disclosing searchable databases; column 7: lines 3-38). Kalmes also discloses scheduling resources needed to perform the service action based on contractual obligations obtained from the remote computer system (see column 7: lines 3-38; specifically, column 7: lines 25-30, disclosing the efficient scheduling of personnel and processes based on critical terms and conditions of contracts in a database).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the non-resource repository of Kalmes with the resource repository of Glazer when scheduling resources. One of ordinary skill in the art would have been motivated to do so for the benefit of more efficiently satisfying demand for products that have been ordered by contract (see Kalmes: column 7: lines 3-38).

The cited references do not explicitly disclose that the non-resource polling occurs after the resource polling, or that the non-resource polling automatically checks whether a proposed schedule complies with non-resource constraint information.

Examiner takes Official Notice that it was well-known in the scheduling arts at the time the invention was made to ensure that non-resource constraints are met (e.g. ensuring that contractual deadlines are met). Furthermore, it is well-known to automate processes. See in re Venner, 262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to automatically check to ensure that non-resource constraints (such as deadlines) are met by a proposed schedule. One of ordinary skill in the art would have been motivated to do so for the benefit of efficiencies and profits associated with customer satisfaction and meeting contractual requirements.

Glazer also does not explicitly disclose wherein the service request comprises a plurality of tasks.

Miller discloses this limitation, including assigning resources to each individual task of a service request (see at least paragraphs 3-5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Glazer's method of assigning resources and scheduling for a service request to the individual task items of that service request as taught by Miller. This combination of known elements produces a result that would be predictable to one of ordinary skill in the art (e.g. assigning resources to multiple tasks that make up a service order).

Claim 30: Glazer does not explicitly disclose the limitations of this claim.

Miller discloses:

- rendering, on a client computer, a graphical user interface, the graphical user interface presenting a user with a generic service order template for a service requested by the service request, the generic service order template comprising a collection of reusable data that identifies each of the tasks to be performed for the service requests, and for each task, a predetermined, expected duration of the task and an identification of other tasks on which the tasks depends (see figures 3-4; paragraphs 44-51);
- receiving user-generated input modifying the generic service order template (see figures 3-4); and
- initiating the scheduling of the service request based on the modified generic service order template (see paragraph 44).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the service order templates taught by Miller to schedule a service as disclosed by Glazer. One of ordinary skill in the art would have been motivated to do so for the benefit of efficiencies gained by streamlining the process of filling out an order form (see Miller: paragraphs 7-8).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Salle (US 2003/0074245), directed to resource allocation using electronic contracts
- Shahabuddin (US 6,877,035), directed to optimal resource allocation including a contractual database
- Kalmick (US 2003/0204430), directed to managing court schedules including dates and deadlines

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neil R. Kardos whose telephone number is (571) 270-3443. The examiner can normally be reached on Monday through Friday from 9 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Boswell can be reached on (571) 272-6737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Neil R. Kardos
Examiner
Art Unit 3623

NRK
9/4/08
/Jonathan G. Sterrett/
Primary Examiner, Art Unit 3623